

Existing MSEC Communities

Town of Berwyn Heights Prince George's

\$20,000

The Town will use their 2017 award to purchase a plug-in hybrid and remove the Town's Administration Department's less efficient car from service. The new vehicle will be purchased from the State contract at a cost of \$30,000. Berwyn Heights will contribute \$15,000 towards the vehicle and level 2 charging station and the Maryland Energy Administration will award the remaining \$20,000. Assuming a reimbursement of \$0.54/mile, to achieve a 10-year payback, the town will need to utilize the new vehicle at least 3,704 miles a year. Contingencies: This award is contingent upon the town agreeing to install a level 2 charging station as well as record the new vehicle usage and submit in monthly reporting.

Town of Boonsboro Washington \$25,000

Boonsboro will use their 2017 award to purchase and install Variable Frequency Drive (VFD) Pump Controllers on two pumps (Shafer Park Well Pump & Graystone Well #8 Pump). The installation of the two pump controllers will result in an annual energy savings of 74,074 kWh and an estimated cost savings of \$7,407. The estimated life of the VFD pump controllers is 25 years, and the simple payback is 3.5 years.

City of College Park Prince George's \$73,000

The City of College Park will use their 2017 award to advance their renewable energy profile and install a 31 kW PV system at the Public Works Facility. The system is expected to produce 40,126 kWh/year with expected savings of \$4,012 annually. The simple payback rate without SRECs would be about 18.2 years.

City of District Heights Prince George's \$65,000

The City of District Heights will use their 2017 award to advance their renewable energy profile and install a minimum a 20 kW PV system at the Police Department at 200 Mulberry Drive. The system is expected to produce about 26,000 kWh/year with expected savings of \$2,860 annually. The simple payback rate without SREC sales would be about 22.7 years, within the 25-year equipment lifetime.

Town of Easton Talbot \$22,500

Easton will use their 2017 award to replace one hundred and ten 190-watt sodium ion street lights with 54 watt LED lights. The expected energy savings is 64,350 kWh annually. The project will result in \$9,652 in annual cost savings and has a simple payback of 2.33 years.

Town of Edmonston Prince George's \$16,275

The town will use their 2017 award to purchase an all-electric vehicle and replace their less efficient 2007 vehicle as well as install a duel level-2 EV charger at their town hall. The total project cost is \$43,770; MSEC will award \$10,000 for the vehicle for a payback of 12 years and fund \$6,275 for the charger and installation.

Town of Forest Heights Prince George's \$15,300

Forest Heights will use their 2017 award to advance their renewable energy profile and install a 4.95 kW roof-mounted PV system at their police station. The system is expected to produce 6,515 kWh/year with expected savings of \$945 annually. The simple payback rate without Solar Renewable Energy Certificates (SRECs) would be about 16.1 years. The system payback will decrease further when the sale of SREC's are realized.

Maryland Smart Energy Communities (MSEC) FY2017 Awards

City of Frederick Frederick \$47,000

Frederick City will use their 2017 award to replace two hundred and forty-seven 250-watt sodium ion street lights with 103 watt LED lights. The expected energy savings is 46,721 kWh annually. The project will result in \$3,971 in annual cost savings and has a simple payback of 11.8 years

City of Frostburg Allegany \$20,000

The City of Frostburg will use their 2017 award to replace their 150 watt streetlights and fixtures with 72 watt LED lights and fixtures. This project involves 100 streetlights. The expected energy savings is 21,851 kWh. The project will have an annual cost savings of \$2,513 and an expected simple payback of 10.6 years.

City of Greenbelt Prince George's \$58,500

The City of Greenbelt will use their 2017 award to advance their renewable energy profile and install a minimum 25.75 kW PV roof-mounted system at the Spring Hill Lake Recreation Center. The system is expected to produce about 31,345 kWh/year with expected savings of \$3,134.52 annually. The simple payback rate without Solar Renewable Energy Certificates (SRECs) sales would be about 18.6 years, within the 25-year equipment lifetime.

City of Hyattsville Prince George's \$62,280

The City of Hyattsville City Police Department will use their 2017 award to purchase four level-2 electric vehicle chargers and replace three gas powered marked police patrol vehicles with two fully electric vehicles and an all-electric motorcycle; all of which will be used as marked police patrol vehicles. With gas savings alone, Hyattsville is expected to save \$5,609 annually for both vehicle and motorcycle. Other savings not included in payback include lower maintenance costs. The simple payback for EV, motorcycle, and two chargers is 11.1 years.

Town of North Beach Calvert \$30,000

North Beach will use their 2017 award to purchase a flatbed as well as purchase and install a level-2 EV charger. With fuel costs alone, the town is expected to save \$4,036 annually. The simple payback on MSEC dollars for the car and charger is 7.4 years.

Town of Ridgley Caroline \$9,500

Ridgley will use their 2017 award to replace a HVAC system and install a tank less water heater in the town hall. Expected energy savings from both Maryland Energy Administration is 8,028 kWh/yr., saving \$883.08 annually for a simple payback of 10.7 years.

Town of Salisbury Wicomico \$35,000

Salisbury will use their 2017 award to replace 50 400 watt streetlights to more efficient 106 watt LEDs. The expected energy savings for 50 lights is 53,655 kWh annually, saving about \$2,951 annually for a simple payback of 9.8 years. *Note: Calculations account for \$0.0542 per kWh for electricity (excludes transmission and distribution fees).*

City of Taneytown Carroll \$30,000

Taneytown will use their 2017 award to upgrade 74 streetlights from 188-watt version to more energy efficient 62 watt LEDs. Total project cost is \$56,360; the city will contribute the remaining \$26,360. The expected energy savings is 29,378 kWh annually, saving about \$3,337 annually for a simple payback of 8.9 years.

Town of Thurmont Frederick \$34,650

The Town of Thurmont will use their 2017 award to replace 63, 175-watt ceramic halide light bulbs with 85-watt LED lamps. The project will save an estimated 24,835 kwh/ year and payback is 1.67 years.



Anne Arundel County \$120,000

Anne Arundel County will use \$70,000 of their 2017 award to advance their renewable energy profile to help defray the cost of a 20kW roof-mounted solar PV array on the Eastern District Police Station. The 20kW system is expected to produce 27,042 kWh/year with expected savings of \$2,974annually. The simple payback rate without Solar Renewable Energy Certificates (SRECs) would be about 23 years. Additionally, the county will use \$50,000 of their 2017 award to fund multiple energy efficiency projects including a building audit, LED lighting, air sealing and insulation. Wall pack lighting upgrades to LED and air sealing/insulation are estimated to save 40,902kWh/yr with payback of 8.47. Indirect costs include audit and 10% admin costs.

Baltimore City \$132,000

Baltimore City will use their 2017 award to upgrade energy efficiency improvements for the city library annex and Northern District Police Station. The improvements to both buildings include retrofitting T8 fixtures with LED, adding daylighting and occupancy control systems, weather stripping, and air sealing. The Northern District Police Station project will cost \$59,194 after rebates and cost share, with savings of 151,396 kWh/year and combined payback of 2.85 years. The library annex upgrades will cost \$60,075 after rebates and cost share with expected savings of 195,326 kWh/year and combined payback of 2.65 years.

Frederick County \$65,855

Frederick County will use their 2017 award to off-set the purchase price of an all-electric transit bus. Previously, the Maryland Energy Administration helped to fund all-electric transit buses with MSEC in FY14, FY15, and FY16, all with an expected payback of 3.8 years. Expected energy savings: approximately 7,533 gasoline gallon equivalent/year per bus. Additionally, the County will replace five (5) 150 watt lights and fixtures with lower energy consuming 40 watt LEDs at Bell Court Senior Apartment Parking Lot. The expected energy savings is 2,409 kWh annually, saving about \$289.08 annually. Eliminating the cost of monthly light adjustments by maintenance staff equates to an additional \$720 annually in maintenance cost savings. Simple payback is 3.2 years.

Harford County \$52,750

Harford County will use their 2017 award to perform lighting retrofits at the Joppa Library and Sodrun Waste Water Treatment Plant (WWTP). The Joppa Library project will replace 6 existing 400-watt metal halide High Pressure Sodium parking lot lights with 94 watt LEDs. This project is expected to save 4,388 kWh annually and \$842.40/year with a simple payback of 4.1 years. The Sodrun WWTP has received MSEC funding for lighting in FY16 and FY15, this award for 2017 will be phase three of their overall energy efficiency upgrades. Phase three will retrofit 69 lights in the ESPN building, secondary clarifiers, fermenter building and denitrification building. Total project cost is \$49,250 with expected savings of 70,293 kWh annually and \$11,160.38/year with a simple payback of 4.41 years.

Montgomery County \$85,000

Montgomery County will use their 2017 award to defray the cost an LED lighting retrofits for their Facility Maintenance Department. The total project cost is \$104,760. The expected energy savings is 139,941 kWh annually, saving about \$16,739 annually for a simple payback of 5.1 years on this State award.



New 2017 MSEC Communities

City of Annapolis Anne Arundel \$40,000

Annapolis is pursuing the Renewable Energy and Energy Efficiency policy goals. For the first year in MSEC, and their award will fund cost effective electricity efficiency projects at city owned facilities.

Town of Indian Head Charles \$25,000

Indian Head is pursuing the Transportation Petroleum Reduction and Energy Efficiency policy goals. For the first year in MSEC, and their award will fund energy efficiency projects at town owned facilities.

Town of Middletown Frederick \$25,000

Middletown is pursuing the Renewable Energy and Energy Efficiency policy goals. For the first year in MSEC, and their award will fund cost renewable energy projects at town owned facilities.

Town of Walkersville Frederick \$25,000

Chestertown is pursuing the Renewable Energy and Energy Efficiency policy goals. For the first year in MSEC, and their award will fund energy efficiency projects at town owned facilities.

Town of New Carrollton Prince George's \$30,000

New Carrollton is pursuing the Transportation Petroleum reduction and Energy Efficiency policy goals. For the first year in MSEC, and their award will fund energy efficiency projects at city owned facilities.

^{*} Awarded funding may differ from actual disbursements based on the community's ability to spend the grant money on the eligible award.